90-01462/ -

Table of Contents

Preface 3

The Business Plan 4

Section 1 — Sales 6
Method A - Top Down 6
Step 1 - Market Area 6
Step 2 - Market Potential 7
Step 3 - Market Shares 8
Method B - Bottom Up 9

Section 2 — Costs 10
Step 1 - Premises, Equipment, Fixtures 10
Step 2 - Direct Expenses 11
Step 3 - Normal Operating Costs 12
Step 4 - Working Capital 13
Step 5 - Depreciation 15

Section 3 — Profitability 16
Step 1 - Yearly Income Projections 17
Step 2 - Cash Flow Projections 18

Section 4 — Feasibility 20
Step 1 - Break-Even Sales 20
Step 2 - Return on Investment 21

Conclusion 22

Tables
A. Assessment of Personal Finances 5
B. Personal Skill and Knowledge 5
C. Constant Payment Table 13

Appendices
I. Total Construction in Manitoba 23
II. City of Winnipeg Building Permits 24

Worksheets
1. Operating Costs 25
2. Working Capital Requirements/ Principal and Interest 26
3. Depreciation Expense 27
4. Projected Income Statement 28
5. Cash Flow Projection 29
6. Break-Even Sales Calculation 30
7. Return on Investment Calculation 30

Preface

The purpose of this publication is to help Manitobans who are planning to start business enterprises in the construction field, or who wish to re-assess the viability of an established enterprise. The help offered here is in the form of a guide to developing a Business Plan. It has been prepared by Manitobans for Manitobans so that its entire contents are applicable to the Manitoba business scene.

The four broad functions of managing a business has been identified as **Planning, Organizing, Directing** and **Controlling.** That Planning comes first is not accidental. It is the very foundation of a successful business because it illuminates the future in such a way as to help the entrepreneur avoid pitfalls and problems; gain self-confidence because he has a track to run on; and, give backers, lenders, suppliers and employees assurance of a solid approach to conduct of the enterprise.

This guide is only one aspect of the assistance that the Business Resource Centre can give to Manitoba business owners and operators.

As you begin to study this guide, you are urged to be honest with yourself. Don't overlook anything. Dig out all the facts. Apply the four C's to your Plan.

Be **candid**	— you will only fool yourself if you are less than honest;
Be **comprehensive**	— examine every facet of your proposed business to make sure you don't overlook an important item;
Be **complete**	— thoroughness is a further step to comprehensiveness;
Be **competitive**	— keep in mind that there will be competition at every turn. In raising money. Getting good employees. Getting share of market. Be realistic.

THE INDIVIDUAL/BUSINESS/CORPORATION/PARTNERSHIP (HEREINAFTER REFERRED TO AS THE CLIENT) ACKNOWLEDGES AND UNDERSTANDS THAT THE GOVERNMENT OF MANITOBA DOES NOT WARRANT OR REPRESENT THE ACCURACY, SUITABILITY OR APPLICABILITY OF THIS (ATTACHED) INFORMATION AND ASSUMES NO RESPONSIBILITY OR LIABILITY FOR THE USE THEREOF BY THE CLIENT AND ANY THIRD PARTIES AND THAT THE INTERPRETATION, USE AND APPLICATION OF SUCH INFORMATION SHALL BE THE CLIENT'S SOLE RESPONSIBILITY.

The Business Plan

A Business Plan is a way of answering the question, "Where will my business be this time next year? Three years from now?"

For a contemplated or new business, a Business Plan can help determine what resources will be needed to ensure its success. It follows then, that if the required resources are not available, it would probably be unwise to launch the enterprise in the form in which it is currently conceived.

For a struggling existing business, a Business Plan can help measure the true condition of the business and reveal its weaknesses and strengths.

For the successful, established business, a Business Plan is equally necessary as a "track to run on" and a source of business information.

A Business Plan is based on assumptions, estimates and forecasts. Therefore, the Business Plan is a guide, a reminder and, to an important degree, a source of challenge.

The Business Plan proposed here has four main sections:

- Sales
- Costs
- Profitability
- Feasibility

Each section provides a step-by-step method for developing your projections. Essential ingredients are identified, examples are shown and space provided for the corresponding figures for your proposed business. For purposes of the examples in this book, a general contractor has been used. The processes illustrated apply, of course, to any or all construction firms including sub-trades.

Once you have completed your Plan, using the techniques suggested here and following the guidesheets (worksheets 1-7) you will have a systemically-prepared, extensive document from which each of the "stakeholders" in your business can make an objective assessment of its future prospects.

The "stakeholders" include:

- **You** — as the person who stands to lose the most if the business falters. To obtain a clear picture of your personal financial needs, complete the "Assessment of Personal Finances" on page 5.
- **Financial Backers** (including silent partners) — all businesses need financial support from outside (friends, relatives, entrepreneurs, bankers, etc.) and these lenders and investors seek assurance of the safety of their investments.
- **Sources of Help** — it is often necessary to turn to others for help in achieving your goals. Complete the "Self-Analysis Test" (see page 5). This will help you recognize where your own knowledge and skills should be supplemented by input from professionals and specialists such as lawyers, accountants, insurance agents, advertising agency, suppliers, educators. Some may help you in the preparation of your Business Plan; all will be more effective if they can see that you have put a lot of thought into your Plan.

Table A

ASSESSMENT OF PERSONAL FINANCES

My Financial Obligations	Amount (per month)
House Mortgage/Rent	
Family Food Bill	
Utility Bills	
Charge Account Spending (yourself and others)	
Operating Costs for Car(s)	
Personal Spending/Recreation	
Repairs to House	
Major Purchases (car, appliances, furniture, etc.)	
Other Expenses:	
Insurance (life, car, house)	
Medical/Dental	
Car Repairs	
Education (family)	
Taxes (property)	
Retirement Savings	
Seasonal Spending (e.g. Christmas)	
Other Expenses (specific to you)	
TOTAL	

	Amount (per month)
My needs per month are	
Other income per month is	
Will my business be able to meet such expenses?	
If not, should I withhold some of the money I expected to invest?	
Amount I expected to invest	
Amount I am now withholding	
New amount I expect to invest	
TOTAL	

Table B

PERSONAL SKILL AND KNOWLEDGE (Self-Analysis)

	Check (√) O.K.	Need Help
Financing		
I know how to analyse options.		
I understand financial jargon.		
I know how to control expenses.		
Marketing		
I am "customer-oriented".		
I am skilled in selling my product/service.		
I understand how to advertise and promote my product/service.		
Display and Signs		
Premises layout		
Staffing		
I know the number of employees I need and the qualifications they must have.		
I am familiar with hiring practices and interviewing.		

	Check (√) O.K.	Need Help
I believe I can motivate my employees to high levels of productivity		
Buying		
I am trained and skilled in buying what customers want.		
I have good supplier contacts.		
I am aware of personal requirements.		
Accounting		
I know which records to keep and what information they should contain.		
I know how to interpret financial statements.		
Bidding (for construction firms)		
I know how to gather data and interpret it for making estimates and bids.		
I understand my limitations in the type and number of jobs on which to bid.		

Section 1 — Sales

There are two methods of making a realistic estimate of gross sales.

The first is called the "top down" method. You start by obtaining the total amount of sales of your particular kind of business in your market area. From this figure, by a series of calculations, you are able to estimate your probable gross sales.

The second method is called "bottom up". It is based on the average purchases of potential customers. Your gross sales figure evolves from factors common to your particular location.

Actually, it is wise to estimate your gross sales by both methods. If the two answers are close, you will be confident of the accuracy of the estimated figure. If not close, you will know that something is amiss. You may have miscalculated; you may have made an unsupported assumption; or, you may have omitted an important factor. Usually, however, the figures tend to converge the second time around. Above all, be as honest and realistic about your estimates as possible.

Let us go through the two methods step by step.

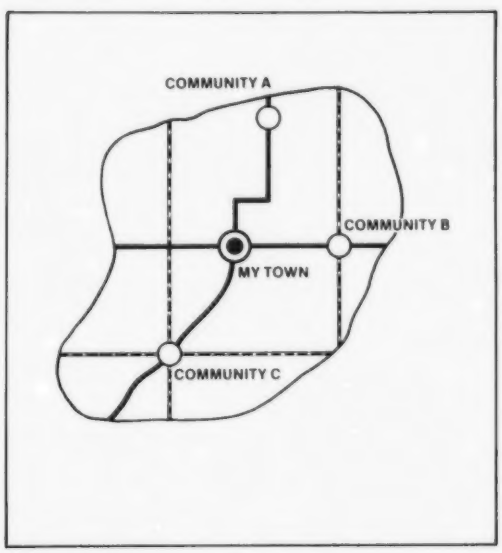
METHOD A — TOP DOWN

Step 1 — Your Market Area

What are the geographical boundaries of your market? Where are you doing business now or (for a new venture) going to do business? Town, neighborhood, entire city, province-wide, rural community? Get a map of the city or district and draw the boundaries of your basic market on it. For contractors — general or sub — that is all there is to Step 1, but it should be given careful thought.

Figure 1

CONSTRUCTION (CONTRACTOR) SALES
Step 1: This category is not based on population but on geographical area in which contractor feels he can operate efficiently. Market determined by personal investigation of present and future prospects.



Step 2 — Total Market Potential

Construction firms and sub-trade contractors can obtain their total market potential (top down) from Stats Canada's Catalogue No. 64-201 which gives the total value of construction work in Manitoba (see Appendix I for a summary) . From this information, you will be able to determine how much of the total was done in your geographic area (Step 1) and how much was the type of work on which you would be able to bid. Review and record the value of the type(s) of jobs you could have done over the last few years. Take this figure, use your knowledge of the trade as a guide, and estimate the value of the work you can expect to get in the next three years.

Some information on construction in the City of Winnipeg is provided in Appendix II.

Figure 2

Step 2 - Total Market Potential (Construction Contractor)

Through investigation and discussion with others in this business, I have determined that my market area accounts for 4% of construction work (repairs included) in Manitoba.

	Year 1	Year 2	Year 3
Estimated value of my type of work in my market area*	$4,000,000	$4,200,000	$4,410,000
Percentage of business I hear about and can bid on**	x 45%	x 45%	x 45%
My total potential market	**$1,800,000**	**$1,890,000**	**$1,984,500**

**Each year is increased by 5% (available data supports this assumption).*

***Based on my knowledge of market.*

Step 3 — Your Market Share

The next step is to estimate the share of the market you might expect to have.

First, find out how many competitors you have in your market area. To do this, simply divide the answer to Step 2 by the number of competitors plus one (you). This will give you an approximate share of market figure.

This approximation is not scientifically determined and is not necessarily the final answer. Judgment, of course, must be used. If you are competing against several large firms, perhaps your market share estimate should be decreased.

If the above results leave you still a bit uncertain, it is because the steps have been "numbers oriented". No distinction was made between new and well-established competitors. Therefore, you should "weigh your numbers" against the assumptions which were adopted in Steps 1-2.

It has been assumed that each of the following aspects or characteristics of your business is **as good as the average for your competitors:**

- reputation
- trade skills
- equipment
- availability
- knowledge of consumer wants and needs
- technical knowledge

Now, as a final review, imagine yourself as established and successful five years from now. Ask yourself this question, "Would a new competitor entering the field now get a full share of the market in the first year or two?" The answer is probably "No". Therefore, you should adjust your final market share according to your estimate of what a newcomer should **really** expect. Unless, of course, you have compelling reasons to support your expectation of a full share in the first year or so.

Figure 3

Step 3 - Market Share - Sales (Construction Contractor)

	Year 1	Year 2	Year 3
Total Market Potential (Step 2)	$1,800,000	$1,890,000	$1,984,500
No. of competitors (including myself)	÷ 10	÷ 10	÷ 10
A competitor's full share	$ 180,000	$ 189,000	$ 198,450
Percentage of full share I expect	x 90%	x 95%	x 100%
Expected annual sales	**$ 162,000**	**$ 179,550**	**$ 198,450**

METHOD B — BOTTOM UP

The "Bottom Up" method of estimating gross sales is based on the number of projects or jobs.

Looking at the construction field (figure 4), a firm must list and evaluate the jobs in its market area on which it would or could bid. In this sense, a job is the same as a customer. It works the same whether the job is as a prime contractor or a sub-contractor. If you are as well-informed as you should be about your line of work, you will know or be able to find out what is currently going on and what is coming up in the construction field. Basing your calculations on when a job will start (as in housing starts), you can estimate pretty accurately the total number of jobs for this year, next year and perhaps beyond. This is your market. Your share will be the number of jobs you get. You should, therefore, keep an ongoing record of the relationship between your share and your estimates or bids.

Figure 4

Method B - (Construction Contractor)

After investigation and talking to other contractors, I estimate an equal share of the market to be about $180,000.

With my experience and contacts, I am already assured of $80,000 in jobs. Therefore, estimated sales during first three years of $155,000, $170,000, $185,000 are reasonable goals.

The above annual sales have been entered on the sample Worksheet, Figure 10. Enter your sales estimates on the blank Worksheet 4, line 1.

Section 2 — Costs

In many ways, this is the most important section because, if you have done your homework, the estimates you will be using will be very close to what you will experience. Also, if your costs are accurately estimated, you can always work back to the number of jobs you need to break even. If the result of such a calculation seems readily obtainable, it can give you added confidence in the potential success of your undertaking.

There are five steps in this section.

Step 1 - Calculate cost of premises and equipment.
Step 2 - Calculate direct expenses.
Step 3 - Calculate normal operating costs.
Step 4 - Calculate initial working capital requirements and principal and interest payments.
Step 5 - Calculate depreciation expense.

Figure 5

Step 1: Building Fixtures & Equipment (Construction Contractor)

Since the building for my office and work shop is being leased, the costs are as follows:

Leasehold improvements (partitioning and decorating)	$ 1,000
Company purchases my truck	4,000
Fixtures (display, shelves in storage area, work bench, counter)	4,000
Equipment (desks, chairs, file cabinet, large pieces of equipment)*	10,000
TOTAL	**$19,000**

Many contractors start out by using garage and yard space at home which can represent a major saving in expenses. Here, however, we are assuming that independent space is needed for storage of equipment, work benches, displays, etc.

*Cut out small pieces of card to scale to represent equipment and fixtures you **must** have. Then, using scaled floor areas, try to fit your items in. This will help you decide on the shape and size of space you need; it will also help you calculate the cost of equipment and fixtures (e.g. size of work benches, amount of storage space, size of office, etc.).*

Step 1 — Cost of premises, equipment and fixturing

The premises you occupy are an important part of your Plan*. Do you need a free-standing building, street frontage, small space or what? Do you want to buy or rent? Are you prepared to undertake extensive renovations? Does your business require unusual building characteristics (e.g. high ceilings?, reinforced floors, loading docks, etc.)?

The decision regarding buy or rent may depend on availability and your financial capacity. You may have to erect your own building. The counsel of a reliable realtor will help you arrive at a decision upon which to estimate the cost of premises. You should keep in mind that you may be faced with some or all of these costs:

- upgrading parking facilities
- altering or installing signage
- changing partitioning
- upgrading storage and bench areas
- painting and decorating
- improving lighting

You should also keep in mind the possibility of expansion. Should you take options on additional space or take more space than you need immediately and sub-let part of it?

If you decide you can afford to construct a new building, you should compare the cost of owning it with leasing it.

If you build your own, take all cost factors into consideration.

If you are leasing, your leasing costs will be readily known and firm. The costs of putting the space in shape to suit your needs will require careful estimating and this is an area where many a new venture fails to consider the real costs of fixing a place up. Things like painting, paving, plumbing, landscaping, partitioning, wiring, etc. can add up to substantial amounts.

The next cost is equipment. This is so different for every line of business. The painting contractor who needs spraying machine, ladders, scaffolding, etc. The excavation contractor with his heavy earth-moving equipment. The carpenter with his power tools. Each has a different level of equipment cost. You will know from the outset your basic equipment needs, without which you can't open for business.

If your type of contracting requires a building and yard to house equipment, materials, demonstration space, offices, etc., follow the suggestion for determining how much space you will need:

As a contractor, you may need a small enclosed building and a large outdoor storage area for equipment. You may need bays for various workshops or plenty of garage and vehicle maintenance space. Here the "card" game is useful. By placing the scale "cards" of each piece of equipment on a scale drawing, you can determine your space needs. This will help you work out your premises, equipment and fixturing costs.

Step 2 — Direct Expenses

Direct expenses refer to those prime costs which tend to rise or change as sales increase. The principal factors are the cost of labour and the cost of materials. It is important to determine what percentage of total sales is consumed with the direct costs of labour and materials. Then you will know what percentage is "left over" to pay all other costs and return you a profit.

(Note: For purposes of this Business Plan, the cost of your — the owner's — time is not included in this step but will appear as a normal operating cost in Step 3.)

You should add the cost of those elements required to "actually get the job done", that is, labour costs and materials cost. Labour costs are those directly related to the job (e.g. a carpenter's time) and do not include the time a bookkeeper may need to keep records related to the job. To arrive at a direct cost figure, add all job-related costs of labour and materials for the period of your Plan.

Figure 6

Step 2 - Direct Expenses (Construction Contractor)

I have some experience with estimating in my present job. In addition, my part-time work in this area of contracting confirms the fact that if I am careful with my material costs and provide much of the required labour myself, my direct expense percentage will be approximately 70%. Using the following estimates for my sales, my direct costs are calculated below:

	Year 1	Year 2	Year 3
Sales	$155,000	$170,000	$185,000
Direct Cost % (material & labour)	x 70%	x 70%	x 70%
Direct Costs	**$108,500**	**$119,000**	**$129,500**
More specifically, the direct costs would be:			
Materials for sales of $145,000		$ 70,000	
Wage cost of hired labour* (including sub-trades)		32,500	
Miscellaneous supplies		6,000	
		$108,500	

The above direct costs have been entered on line 2 of figure 10.

** This total includes an amount for benefits for all employees.*

Step 3 — Normal Operating Costs

Most of the items under this heading are the type of expenditure every business anticipates. It is wise, however, to check the list below to make sure you have not forgotten any important item(s). The list here is not exhaustive so you may also think of something else that applies to your kind of business, either exclusively or that has been omitted from the list.

Normal Operating Costs

Salaries/Wages
- salaries (owner, managers)
- wages (employees not covered in Step 2)

Occupancy
- rent
- repair and maintenance
- business tax

General
- advertising
- delivery
- insurance
- legal and audit
- business travel
- utilities
- automobile(s)
- dues and licenses
- interest (will be calculated separately in Step 4)
- supplies
- depreciation (will be calculated separately in Step 5)
- other

Figure 7

Step 3 - Operating Costs (Construction Contractor)

	Amount
Salary, Wages and Benefits	
salary (of owner)	$15,000
wages and benefits (2 helpers in Summer — their wages included in Step 2)	0
Occupancy	
rent	7,800
repairs and maintenance	800
business tax	1,000
General	
advertising	1,200
truck / delivery	3,000
dues and licenses	350
insurance	2,000
interest (not calculated yet - see Step 4)	
legal and audit	1,200
supplies (including some tools)	3,000
business travel	500
utilities (some included in rent)	1,000
other	500
TOTAL	$37,350

The above operating costs have been entered on line 4 of figure 10.

NOTE TO READER: Figures 7 through 13 are completed with information drawn from the example of a construction contractor. To do your own calculations, use Worksheets 1 to 7, which are blank forms similar to Figures 7-13. The Worksheets follow page 24.

Step 4 — Working Capital Requirements: Principal and Interest Payments

In addition to all the expenses you have estimated so far, there are also two very important items: interest and depreciation. In previous steps, you have been building up a picture of the basic costs involved and it is more than likely that you will have to borrow money to meet these expenses. This brings in the expense item of interest, which could not be introduced until you had some idea of the extent of borrowing and credit you need.

But, first, you will want to find out what your capital requirements are. To get this figure, add the estimated cost of your initial inventory, the value of your credit sales (if any) and the cost figure from Step 1 (premises, equipment and fixtures). Be sure to include non-recurring start-up costs such as legal fees, initial advertising, etc.

For construction firms, a value-rated listing of all items of your initial inventory is helpful. You will want to be well equipped so that you won't have to turn jobs down in the early days. Your total inventory (material and equipment) represents a large part of your working capital requirement.

You will often have to extend credit, particularly under the terms of certain contracts. There are also delays in receiving payment due to the accounts payable systems of governments and other large organizations. For this reason, it is wise to list a figure representing "receivables".

Next, estimate the amount of inventory (materials) you must carry initially and list it as a working capital requirement.

Some businesses find advantages in offering their own credit, in addition to cash and credit cards. If you plan to do this, estimate the volume of credit sales and list the amount as a working requirement.

Once you have totalled your capital requirements, you can then determine how much you will need to borrow. This is usually a simple exercise of subtracting the amount of your own resources you can invest from total capital requirements.

Remember, lending institutions will look at the equity you are willing to commit to your business venture as a sign of your confidence in it. It is not uncommon for lenders to require the owner(s) of a small business to have a substantial investment in the venture (20%-25%) as a condition of the loan. If you are not likely to be able to raise such an investment, your plans should probably be scaled down or otherwise adjusted. Ask for a copy of the publication, "Small Business Management Systems — Financing" which gives information on source of financing and how to make your approach.

However, once you have determined the amount you must borrow, you can calculate your annual interest payments. This calculation is based on three factors:

1. Amount of a term loan and the amount of a line of credit.
2. Repayment period in years for the term loan.
3. Interest rate you will be charged on the term loan and the line of credit.

The accompanying table can be used to calculate the annual payment for your term loan:

Table C

Constant Payment Table

REPAYMENT PERIOD IN YEARS	INTEREST RATE 10%	12%	14%	16%	18%
5	3.791	3.605	3.433	3.274	3.127
6	4.355	4.111	3.889	3.685	3.498
7	4.868	4.564	4.288	4.039	3.812
8	5.335	4.968	4.639	4.344	4.078
9	5.759	5.328	4.946	4.607	4.303
10	6.145	5.650	5.216	4.833	4.494
15	7.606	6.811	6.142	5.575	5.092

Figure 8

Step 4 - Working Capital Requirements/ Principal and Interest Payments (Construction Contractor)

- **Building, fixtures and equipment (including trucks) (Step 1)**

Leasehold improvements (partitioning and decorating)	$ 5,000	
Company purchases my truck	12,000	
Fixtures (display, shelves in storage area, work bench, counter)	4,000	
Equipment (desks, chairs, file cabinet, large pieces of equipment)	10,000	
Total		$31,000

- **Initial Inventory** — Although I will keep it as low as possible, I will require at least $10,000 in initial inventory. $10,000

- **Accounts receivable** — Wherever possible, I will require a deposit before work begins. However, most of my sales will be on account with 30-day terms. So that I do not underestimate this expense, I will calculate all sales as accounts receivable*.

Value of 1 month's credit: $\frac{\$155{,}000}{12}$ = $12,917

- **Total Capital Required** $53,917

- **Minus: Personal Investment** (after completing personal financial investment sheet) $26,000

- **Equals: Amount to be borrowed** $27,917

- **Term Loan:** $20,000 for 5 years @ 14%
  Line of Credit: $10,000 arranged @ 16%

$$\frac{\text{Term Loan}}{\text{Level Factor From Table}} = \frac{\$20{,}000}{3.433} = \$5{,}826 \text{ annual payment}$$

- **Calculation of Interest on Term Loan**

Year	Payment	Interest** Portion	Repayment Portion	Balance
0	—	—	—	$20,000
1	$5,826	$2,800	$3,026	16,974
2	5,826	2,376	3,450	13,524
3	5,826	1,893	3,933	9,591
4	5,826	1,343	4,483	5,108
5	5,825	715	5,110	0

- **Calculation of Annual Interest on Line of Credit****
  Maximum possible interest expense $10,000 x 16% = $1,600

- **Total Yearly Interest Expense**

Year 1 $2,800 + $1,600 = $4,400
Year 2 $3,976 + $1,600 = $5,576
Year 3 $3,493 + $1,600 = $5,093

Remember receivables have a tendency to exceed credit limits in the construction trades.

***Interest expense for the term loan and the line of credit has been entered on line 5 of figure 10.*

Step 5 — Depreciation

Depreciation is an expense which approximates the use of your firm's fixed assets such as equipment, machinery, leasehold improvements, vehicles, etc. These assets are placed into asset categories and the value of each category is depreciated yearly. Yearly depreciation expense is based on an annual rate which will vary according to the asset category. The appropriate rate is applied to the undepreciated value of each asset category to obtain a dollar amount and the sum of these amounts constitutes depreciation expense.

Specific information on your asset categories, the type of asset that each category includes, and the appropriate depreciation rate to be used can be obtained from your local Taxation Office.

The steps to follow are these:

1. List all fixed assets with cost of each.
2. Obtain appropriate depreciation rates (from local Taxation Office).
3. Multiply cost of asset x depreciation rate to get depreciation for each asset.
4. Total all depreciation amounts to get depreciation expense for first year.

For the second year, the amount for 1. above will be original cost less first year depreciation. The figure to be used in the third year would be original cost less depreciation for the first two years. (See example in figure 9.)

Figure 9

Step 5 - Depreciation Expense (Construction Contractor)

Year 1

Item	Cost	Depreciation Rate	Depreciation Expense	Undepreciated Value
trucks	$12,000	30% x ½	$1,800	$10,200
leasehold improvements	5,000	*	500	4,500
fixtures	4,000	20% x ½	400	3,600
equipment	10,000	20% x ½	1,000	9,000
TOTAL	**$31,000**		**$3,700**	

Year 2

Item	Cost	Depreciation Rate	Depreciation Expense	Undepreciated Value
trucks	$10,200	30%	$3,060	$ 7,140
leasehold improvements	4,500	*	900	3,600
fixtures	3,600	20%	720	2,880
equipment	9,000	20%	1,800	7,200
TOTAL			**$6,480**	

Year 3

Item	Cost	Depreciation Rate	Depreciation Expense	Undepreciated Value
trucks	$ 7,140	30%	$2,142	$4,998
leasehold improvements	3,600	*	720	2,880
fixtures	2,880	20%	576	2,304
equipment	7,200	20%	1,440	5,760
TOTAL			**$4,878**	

** Leasehold improvements are depreciated by an equal amount each year in the life of the 5 year lease. First year depreciation rate is ½ of normal rate. Depreciation expense has been entered on line 6 of figure 10.*

Section 3 — Profitability

If you have been completing the various steps for your own Business Plan as the method has unfolded, you will have done a lot of work and you will also have a more intimate knowledge of your venture.

In this section, the following important questions will be answered:

1. Is my venture going to be profitable? (Is my Net Profit after Tax positive?)
2. What will my cash flow be like during the first year?
3. At what point during the first year can I expect the tightest cash flow period?

Although the answer to the first question is obviously important, too often the answers to the second and third questions are taken too lightly or ignored. A cash flow projection is a forecast of the revenues and expenses you will experience in the first year of operation. This projection focuses on your bank account. It is not uncommon for a small business to be earning a decent profit yet be struggling because of a cash shortage.

This cash flow projection is a technique that can be used as an early warning system to indicate a potential problem before it becomes a crisis. Should your cash flow projection forecast such a situation, you can secure the necessary resources to deal with the problem or adjust your practices to cope with it.

Step 1 — Yearly Income Projections

At this stage, it might be wise to review all your calculations to date to make sure that there are no errors.

Now, transfer the numbers you have obtained (see Worksheet 4).

(a) Enter Gross Sales figures for each of the next three years. (Section 1, Step 3, page 18)
(b) Enter Direct Costs (Section 2, Step 2, Page 11) for all three years.
(c) Subtract (b) from (a) to obtain your Gross Profit for each year.

Next,

(d) For each year, fill in:
  (i) normal operating costs (Section 2, Step 3, Page 12);
  (ii) interest payments (both term and line of credit for first year) (Section 2, Step 4, Page 14);
  (iii) depreciation expense (Section 2, Step 5, Page 15).
(e) Total the amounts in (d).
(f) Subtract total in (e) from Gross Profit (c) to get Net Profit before Taxes.
(g) Estimate Income Taxes.
(h) Subtract Income Taxes (g) from Net Profit before Taxes (f) to obtain Net Profit **after** Taxes.

Figure 10

Projected Income Statement (Construction Contractor)

Line	Item	Section	Step	Page	Year 1	Year 2	Year 3
1	*Sales Method A Method B	1 1	1-4	6-8 9	$155,000	$170,000	$185,000
2	Direct Costs	2	2	11	108,500	119,000	129,500
3	**Gross Profit** (line 1 minus line 2)				**$ 46,500**	**$ 51,000**	**$ 55,500**
4	Normal Operating Expenses	2	3	12	37,350	39,591	41,966
5	Interest Term Loan	2	4	14	2,800	2,376	1,893
	Line of Credit	2	4	14	1,600	1,600	1,600
6	Depreciation **	2	5	15	3,700	6,480	4,878
7	**Total Expenses** (line 4-6)				**$ 45,450**	**$ 50,047**	**$ 50,337**
8	Net Profit (line 3 minus line 7)				1,050	953	5,163
9	Income Taxes (28%)***				294	267	1,446
10	**Net Profit After Taxes** (line 8 minus line 9)				**$ 756**	**$ 686**	**$ 3,717**

**Figures are conservatively estimated from results of Methods A and B.*

*** Depreciation expense might be handled differently for tax purposes.*

**** Income taxes may be handled differently.*

Step 2 — Cash Flow Projections

To chart your cash flow position in each month of your first year, set up a system for recording your cash receipts and disbursements (see Worksheet 5). Using this form, you will be able to pinpoint the times during the year when cash will be tight. You have already gathered the information necessary to complete this cash flow projection.

Your cost estimates are recorded in Steps 1-5 of Section 2. Your sales estimate is recorded on figure 10, page 17. The distribution of this sales total to each month of the year and to the cash and credit options will be made easier by the answers to the following questions:

1. How are sales distributed over the seasons and months of the year?
2. What percentage of your annual sales are cash, credit card or receivable?

You have already collected the answers to these questions in Section 1, Method B.

Figure 11

CASH FLOW PROJECTION (Construction Contractor)

		Month 1	Month 2	Month 3	Month 4
Receipts	Cash Sales	2,067	1,550	3,100	4,650
	Collections on Account	—	2,067	3,616	4,650
	Other Income				
	Total Receipts	2,067	3,617	6,716	9,300
Disbursements	Purchases	14,800	2,100	4,200	6,300
	Owner's Drawings	1,250	1,250	1,250	1,250
	Payroll — Gross				
	Rent	650	650	650	650
	Repairs & Maintenance			400	
	Business Tax			250	
	Advertising	300	50	200	50
	Automobile / Delivery	250	250	250	250
	Dues & Licenses	175			
	Insurance	2,000			
	Interest	366	367	367	366
	Legal & Audit	200			
	Supplies	1,500			500
	Business Travel	200	100	100	
	Utilities	150	150	100	100
	Other		100		100
	Total Disbursements	21,841	5,017	7,767	9,566
Cash from Operations		(19,774)	(1,400)	(1,051)	(266)
Cash Total — Start of Period		35,000	5,974	4,322	3,019
	Total Cash - Surplus (Deficit)	15,226	4,574	3,271	2,753
Other Payments	Asset Purchases	19,000	0	0	0
	Equity Withdrawals	0	0	0	0
	Loan Repayments	252	252	252	252
	Total Other Payments	19,252	252	252	252
	Total Cash - Surplus (Deficit)	(4,026)	4,322	3,019	2,501
Other Receipts	Equity Increase	0	0	0	0
	Line of Credit	10,000	0	0	0
	Sales of Assets	0	0	0	0
	Total Other Receipts	10,000	0	0	0
	Cash Total - End of Period	5,974	4,322	3,019	2,501

th 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Total
0	3,100	4,650	5,167	5,684	6,200	6,200	5,684	4,650	3,617	3,100	51,669
7	3,616	4,650	7,750	9,817	10,849	11,883	12,400	11,883	10,333	8,267	93,515
7	6,716	9,300	12,917	15,501	17,049	18,083	18,084	16,533	13,950	11,367	145,184
0	4,200	6,300	9,000	7,700	8,400	8,400	9,700	6,300	4,900	4,200	86,000
0	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250	15,000
			3,250	4,875	4,875	6,500	6,500	4,875	1,625		32,500
0	650	650	650	650	650	650	650	650	650	650	7,800
	400							400			800
	250			250			250			250	1,000
0	200	50	50	50	50	50	50	150	150	50	1,200
0	250	250	250	250	250	250	250	250	250	250	3,000
					175						350
											2,000
7	367	366	367	367	366	367	367	366	367	367	4,400
					100					900	1,200
		500				500			500		3,000
0	100								100		500
0	100	100	100	50	50	50	50	50	50	100	1,000
0		100		100		100			100		500
7	7,767	9,566	14,917	15,542	16,166	18,117	19,067	14,291	9,942	8,017	160,250
	(1,051)	(266)	(2,000)	(41)	883	(34)	(983)	2,242	4,008	3,350	(15,066)
	4,322	3,019	2,501	249	(45)	586	300	(935)	1,055	4,811	35,000
	3,271	2,753	501	208	838	552	683	1,307	5,063	8,161	19,934
	0	0	0	0	0	0	0	0	0	0	19,000
	0	0	0	0	0	0	0	0	0	0	0
	252	252	252	253	252	252	252	252	252	253	3,026
	252	252	252	253	252	252	252	252	252	253	22,026
	3,019	2,501	249	(45)	586	300	(935)	1,055	4,811	7,908	(2,092)
	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	10,000
	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	10,000
	3,019	2,501	249	(45)	586	300	(935)	1,055	4,811	7,908	7,908

Section 4 — Feasibility

Now, it's decision time!

Should you go ahead with your venture? Does your dream or plan need to be adjusted or altered to ensure success?

You will probably have a strong sense of the right answer by now if you have diligently completed all the steps set out here. You may still however be a bit uncertain or apprehensive. The following steps are offered as a means of helping you confirm your decision.

Step 1 — Break-Even Sales

"Break-Even Sales" is the volume of sales necessary to cover all expenses. Once calculated, it should represent the minimum acceptable sales level for the first year. It is a "floor". If sales drop below this level you will be losing money. The "Break-Even Sales" figure is important when you are trying to decide whether your business will survive its first (and usually most difficult) year. It is a signal that warns you of the risk you may be taking.

To obtain your "Break-Even Sales" figure, follow these steps:

1. Divide your expected gross profit in Year 1 by your sales in Year 1. This will give you your Gross Profit Percentage.
2. Divide the Gross Profit Percentage into Yearly Operating Expenses (total of Section 2, Steps 3, 4, and 5). This will give you your "Break-Even Sales".

Figure 12

Break-Even Sales Calculation (Construction Contractor)

Year 1 Gross Profit $ 46,500

Year 1 Estimated Sales $155,000

$$\text{Gross Profit Percentage} = \frac{\text{Gross Profit Year 1}}{\text{Sales Year 1}} = \frac{\$46{,}500}{\$155{,}000} = 30\%$$

Total Operating Expenses Year 1 $45,450

$$\text{Break-Even Sales} = \frac{\text{Total Operating Expenses}}{\text{Gross Profit Percentage}} = \frac{\$45{,}450}{.30} = \$151{,}500$$

Step 2 — Return on Owner's Investment

Return on Owner's Investment shows the earnings potential. It is expressed as a percentage so that it can be compared with other possible avenues of investment you might be considering. It represents a monetary or dollar factor. In comparing an investment in your own business with investing in someone else's enterprise (e.g. buying stocks or bonds, becoming a silent partner, etc.), there are factors other than monetary to be considered such as personal independence, challenge, security, responsibility.

To calculate your Return on Investment, follow these steps:

1. Divide Net Profit after Taxes by the amount of your Owner's Investment and multiply by 100. This will give you the Return on Investment percentage for year one.
2. To calculate this for year two (and three), add Net Profit after Taxes for year one to the Owner's Investment and follow procedure as in 1. above.

$$\frac{\text{Net Profit After Taxes (Year Two)}}{\text{Owner's Investment + Net Profit After Taxes (Year One)}} \times 100 = \text{Return on Investment (Year Two)}$$

Figure 13

Return on Investment Calculation (Construction Contractor)

	Year 1	Year 2	Year 3
Net Profit After Tax	$ 756	$ 686	$ 3,717
Owner's Investment*	26,000	26,756	27,442
Return on Owner's Investment	2.9%	2.6%	13.5%

**Net profit after tax is added to actual investment to generate owner's investment for the next year.*

Conclusion

The rate of return on my investment is adequate. The cash flow projection does not indicate a large problem if I finance the venture this way. Even though my salary will be between $12,000 and $15,000 during these three years, my decision is to GO AHEAD.

Conclusion

At this point, if you have followed the steps recommended on the preceding pages, you will know or at least better appreciate the following:

- The likelihood of attaining your "Break-Even Sales" level and, therefore, the dollar value of the risk you will be taking.
- The approximate return on the money you intend to invest, and therefore, the degree of attractiveness of your investment.
- The cash flow implications of getting into this kind of business.
- The chances of being able to "sell" other investors or financial institutions on backing your Plan.

If you make a Business Plan, following the steps outlined here, you will have a most effective instrument to support you in seeking financial support. It will help you explain your proposal. Its systematic, common-sense approach will impress bankers and other sources of financial backing. It will give suppliers more confidence.

If your Business Plan now says, "Go Ahead!", you should tidy it up, have it typed if possible, make a few copies and put them in attractive binders or folders (available from office supply stores) and set out to call on those whose help you need to launch your business. This approach is also suited to the situation where you are seeking support for expansion, re-financing, increased inventories, etc.

If, on the other hand, your Business Plan says, "Hold It!", don't give up immediately. Be thankful you have been warned of possible disaster. Then, go back over the whole Plan and the idea it supports. Can you make changes or adjustments, cut back on something, be a little less ambitious for the early years? It is unusual if a Business Plan comes out perfectly the first time around.

Be realistic yet imaginative. Hard-headed yet daring. Cautious yet confident.

In Closing

This and other Business Plan formats, with examples and explanations, have been published by the Business Development Centre to help and encourage Manitobans who wish to embark on business ventures in the manufacturing, retail, service and construction fields. If you would like to discuss your Business Plan or have problems and questions related to its preparation, feel free to call the Centre and arrange to meet with one of the counsellors.

Manitoba Industry, Trade & Tourism

Business Resource Centre
6th Floor, 155 Carlton Street
Winnipeg, Manitoba
R3C 3H8 **Phone: 945-7738**
Toll Free in Manitoba: 1-800-282-8069

Western Regional Office
P.O. Box 1300
231-10th Street
Brandon, Manitoba
R7A 6N1 **Phone: 1-726-6250**

Prepared by The Manitoba Institute of Management, Inc. for Manitoba Industry, Trade & Tourism

Appendix I

TOTAL CONSTRUCTION IN MANITOBA (IN MILLIONS OF DOLLARS)

	1986			1987		
	New	Repair	Total	New	Repair	Total
Total Construction in Manitoba	2,414,969	383,222	2,798,191	2,395,482	539,254	2,934,736
Total Building Construction	1,635,742	234,348	1,870,090	1,641,973	350,711	1,992,684
Residential	1,000,819	121,100	1,121,919	1,120,960	124,200	1,245,160
Industrial	49,926	21,202	71,128	38,574	33,105	71,679
Commercial	311,184	53,064	364,248	252,244	64,889	317,133
Institutional	195,659	17,168	212,827	151,764	105,216	256,980
Other Building Construction	78,154	21,814	99,968	78,431	23,301	101,732
Total Engineering Construction	779,227	148,874	928,101	753,509	188,543	942,052

	1988		
	New	Repair	Total
Total Construction in Manitoba	2,623,003	565,332	3,188,335
Total Building Construction	1,663,468	370,065	2,033,533
Residential	1,100,438	128,000	1,228,438
Industrial	48,336	35,616	83,952
Commercial	289,749	72,335	362,084
Institutional	138,385	109,973	248,358
Other Building Construction	86,560	24,141	110,701
Total Engineering Construction	959,535	195,267	1,154,802

NOTE: The reader should familiarize himself/herself with the method(s) used to compile the above statistics (source: Statistics Canada; catalogue number 64-201).

Appendix II

BUILDING PERMIT ACTIVITY BY BUILDING TYPE
FOR THE MONTH OF DECEMBER 1988
COMPARED TO 1987
IN THE CITY OF WINNIPEG AND ADDITIONAL ZONE

	VALUE IN $000					NUMBER OF PERMITS ISSUED				
	MONTH		YEAR TO DATE			MONTH		YEAR TO DATE		
BUILDING TYPE	1988	1987	1988	1987	% CHANGE	1988	1987	1988	1987	% CHANGE
RESIDENTIAL										
Single	9,613	8,038	217,689	236,481	−8%	123	108	2,747	3,298	−17%
Semi	181	0	5,815	1,162	+400%	3	0	55	14	+293%
Row	928	0	14,599	8,556	+71%	3	0	21	21	0%
Apartment	4,930	0	60,446	97,367	−38%	4	0	60	56	+7%
Alterations/Additions	1,549	1,245	32,271	32,359	0%	149	150	4,254	4,167	+2%
****TOTAL, RESIDENTIAL****	17,201	9,283	330,821	375,925	−12%	282	258	7,137	7,556	−6%
NON-RESIDENTIAL										
Alterations/Additions	12,673	8,732	109,262	122,817	−11%	262	298	3,420	3,612	−5%
Commercial	2,356	2,213	36,629	73,432	−50%	13	7	144	130	+11%
Industrial	1,169	331	25,415	17,756	+43%	14	3	165	106	+56%
Office	490	0	24,765	31,225	−21%	2	0	30	16	+88%
Hotel/Motel	0	0	2,207	6,343	−65%	0	0	2	6	−67%
Public Buildings/Theatres	464	1,453	5,018	4,399	+14%	2	2	21	24	−12%
Institutional	300	0	20,417	20,749	−2%	1	1	42	32	+31%
****TOTAL, NON-RESIDENTIAL****	17,452	12,729	223,712	276,720	−19%	294	311	3,824	3,926	−3%
GRAND TOTAL	**34,653**	**22,012**	**554,533**	**652,644**		**576**	**569**	**10,961**	**11,482**	
% CHANGE	+57%		−15%			+1%		−5%		

Source: Building Permits Section
City of Winnipeg

Worksheet 1

Operating Costs
(see figure 7 on page 12)

	Amount
Salary, Wages and Benefits	
salary (of owner)	
wages and benefits (2 helpers in Summer — their wages included in Step 2)	
Occupancy	
rent	
repairs and maintenance	
business tax	
General	
advertising	
truck	
delivery	
dues and licences	
insurance	
interest	
legal and audit	
supplies (including tools)	
business travel	
utilities (some included in rent)	
depreciation	
other	
TOTAL	

Worksheet 2

Working Capital Requirements/ Principal and Interest Payments (see figure 8 on page 14)

- **Building, fixtures and equipment (including trucks) (Step 1)**
  Leasehold improvements (partitioning and decorating) _____

  Company purchases my truck _____

  Fixtures (display shelves in storage area, work bench, counter) _____

  Equipment (desks, chairs, file cabinet, large pieces of equipment) _____

  Total _____ _____

- **Initial Inventory** —Although I will keep it as low as possible, I will require at least $ _____ in initial inventory _____

- **Accounts receivable** — Wherever possible, I will require a deposit before work begins. However, most of my sales will be on account with 30-day terms. So that I do not underestimate this expense, I will calculate all sales as accounts receivable*.

  Value of 1 month's credit: _____ / 12 = _____

- **Total Capital Required** _____

- **Minus: Personal Investment** (after completing personal financial investment sheet) _____

- **Equals: Amount to be borrowed** _____

- **Term Loan** _____

  Line of Credit: _____

  $$\frac{\text{Term Loan}}{\text{Level Factor from Table C}} = ____ = ____$$ (annual payment)

- **Calculation of Interest on Term Loan**

Year	Payment	Interest Portion	Repayment Portion	Balance
0				
1				
2				
3				
4				
5				

- **Calculation of Annual Interest on Line of Credit**
  Maximum possible interest expense = $_____ x _____ % = _____

- **Total Yearly Interest Expense:**
  Year 1 _____ + _____ = _____
  Year 2 _____ + _____ = _____
  Year 3 _____ + _____ = _____

* *Remember: receivables have a tendency to exceed credit limits in the construction trades.*

Worksheet 3

Depreciation Expense
(see figure 9, page 15)

Year 1

Item	Cost	Depreciation Rate	Depreciation Expense	Undepreciated Value
used truck				
leasehold improvements				
fixtures				
equipment				
Total				

Year 2

Item	Undepreciated Value	Depreciation Rate	Depreciation Expense	Undepreciated Value
used truck				
leasehold improvements				
fixtures				
equipment				
Total				

Year 3

Item	Undepreciated Value	Depreciation Rate	Depreciation Expense	Undepreciated Value
used truck				
leasehold improvements				
fixtures				
equipment				
Total				

Worksheet 4

Projected Income Statement
(see figure 10, page 17)

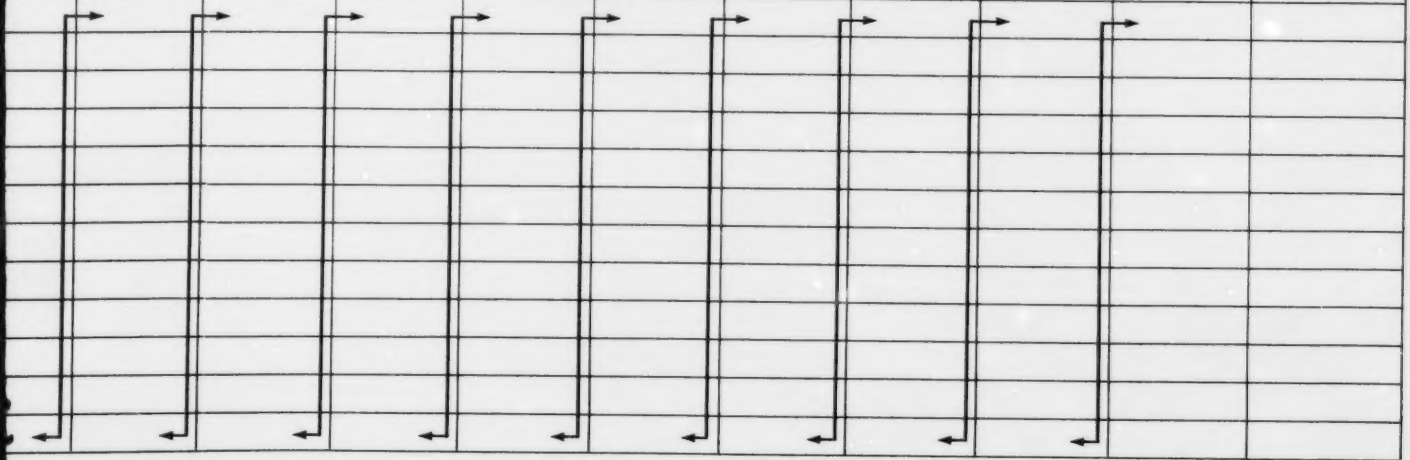
Line	Item	Section	Step	Page	Year 1	Year 2	Year 3
1	Sales Method A	1	1-4	6-8	$	$	$
	Method B	1	1	9			
2	Direct Costs	2	2	11			
3	**Gross Profit** (line 1 minus line 2)				$	$	$
4	Normal Operating Expenses	2	3	12			
5	Interest Term Loan	2	4	14			
	Line of Credit	2	4	14			
6	Depreciation	2	5	15			
7	**Total Expenses** (lines 4-6)				$	$	$
8	Net Profit (line 3 minus line 7)						
9	Income Taxes (28%)						
10	**Net Profit After Taxes** (line 8 minus line 9)				$	$	$

Worksheet 5

Cash Flow Projection
(see figure 11, page 19)

		Month 1	Month 2	Month 3	Month 4	Month
Receipts	Cash Sales					
	Collections on Account					
	Other Income					
	Total Receipts					
Disbursements	Purchases					
	Owner's Drawings					
	Payroll — Gross					
	Rent					
	Repairs & Maintenance					
	Business Tax					
	Advertising					
	Automobile					
	Delivery					
	Dues & Licenses					
	Insurance					
	Interest					
	Legal & Audit					
	Supplies					
	Business Travel					
	Utilities					
	Other					
	Total Disbursements					
Cash from Operations						
Cash Total — Start of Period						
	Total Cash — Surplus (Deficit)					
Other Payments	Asset Purchase					
	Equity Withdrawals					
	Loan Repayments					
	Total Other Payments					
	Total Cash — Surplus (Deficit)					
Other Receipts	Equity Increase					
	Loan Proceeds					
	Sales of Assets					
	Total Other Receipts					
	Cash Total — End of Period					

onth 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Total



Worksheets 6 & 7

Break-Even Sales Calculation
(see figure 12, page 20)

Year 1 Gross Profit _____

Year 1 Estimated Sales _____

Gross Profit Percentage = $\frac{\text{Gross Profit Year 1}}{\text{Sales Year 1}}$ = _____ = _____

Total Operating Expenses Year 1 _____

Break-Even Sales = $\frac{\text{Total Operating Expenses Year 1}}{\text{Gross Profit Percentage}}$ _____ = _____

Return on Investment Calculation
(see figure 13, page 21)

	Year 1	Year 2	Year 3
Net Profit After Tax			
Owner's Investment*			
Return on Owner's Investment			

Conclusion:

**Net profit after tax is added to actual investment to generate owner's investment for the next year.*